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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/529,914	07/14/2005	Michel-Guy Francon	Q87202	5421
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SUITE 800				
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EXAMINER				
SHAI, TANMAY K				
ART UNIT		PAPER NUMBER		
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/529,914

Applicant(s)

FRANCON ET AL.

Examiner

TANMAY K. SHAH

Art Unit

2611

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 April 2005.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-6 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date 4/1/2005
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____

DETAILED ACTION

1. This communication is in response to Application No. 10/529,914 filed on 04/01/2005, claims 1 – 6 have been examined.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 1,4-6 are rejected under 35 U.S.C. 102(b) as being anticipated by **Jolma et al. (US 5,652,748) (Jolma hereafter)**.

Regarding claim 1, **Jolma teaches** A receiver for a spread-spectrum telecommunication system, the receiver including:

- a first receiver (16) (i.e. **Rake Receiving Unit, 41 of Fig. 3**) with at least two demodulation channels (20-1, 20-n) (**51a...51c of Fig. 4**) and a first combiner (22) receiving (i.e. **combiner and demodulator, 52 of Fig. 4**) the demodulated signals supplied by the demodulation channels (**col 4, line 40 - 52**);

-a second receiver (18) (i.e. **Rake Receiving Unit, 42 of Fig. 3**) with at least two demodulation channels (24-1, 24-n) (**51a...51c of Fig. 4**) and a second

Art Unit: 2611

combiner (26) receiving (i.e. **combiner and demodulator, 52 of Fig. 4**) the demodulated signals supplied by the demodulation channels; and

-a third combiner (28) (i.e. **combiner, 40 of Fig. 3**)receiving the signals supplied by the first and second combiners (see **Fig. 3, 41 and 42 and 40 of Fig. 3, col 4, line 60 - 64**),

- reception by means of the first receiver and reception by means of the second receiver being effected by despreading using the same code for dispreading (i.e. **controlling the inner function of the receiving unit, col 4, line 50 - 64**).

Regarding claim 4, **Jolma teaches** telecommunication system including:

- terrestrial repeaters and a complementary source (i.e. **terrestrial or satellite, col 2, line 36 - 44**);
- a receiver according to claim 1.

Regarding claim 5, there are substantially same limitations as claim 1, thus the same rejection is applicable.

Regarding claim 6, the method according to claim 1, characterized by a step of combining signals received by means of the first rake (16) (i.e. **Rake receiving**

Art Unit: 2611

unit, 41 of Fig. 3) receiver and signals received by means of the second rake
(18) (i.e. **Rake receiving unit, 42 of Fig. 3)** receiver.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 2-3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jolma et al. (US 5,652,748) in further view of Schmidl et al. (US 2004/0033791).

Regarding claim 2, Jolma teaches system of claim 1, however it does not explicitly teach time between the spreading sequence.

Schmidl et al. teaches Regarding claim 2, **Jolma teaches** the receiver according to claim 1, characterized in that the time difference between the recombination window of the first receiver and the recombination window of the second receiver is greater than 30 μ s (i.e. **0.8138 microsecond for bit and it has 64 to 512chips which make time >30 μ s, page 1, paragraph 3).**

It would have been obvious to the ordinary skilled in the art at the time the invention was made to combine the teachings of Jolma with Schmidl. One would be motivated to combine those teachings because the time between spreading

Art Unit: 2611

codes help prevent overlap in the transmitted data or frame or spreading sequence.

Regarding claim 3, Regarding claim 2, Jolma teaches system of claim 1, however it does not explicitly teach time between the spreading sequence.

Schmidl et al. teaches the receiver according to claim 1 or claim 2, characterized in that the recombination window of the first receiver and the recombination window of the second receiver cover a time span of at least 50 μ s (i.e. **0.8138 microsecond for bit and it has 64 to 512 chips which make time 52.8 μ s to 416.6 μ s. the difference will be more than 50 μ s, page 1, paragraph 3).**

It would have been obvious to the ordinary skilled in the art at the time the invention was made to combine the teachings of Jolma with Schmidl. One would be motivated to combine those teachings because the time between spreading codes help prevent overlap in the transmitted data or frame or spreading sequence.

Conclusion

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to TANMAY k. SHAH whose telephone number is (571)270-3624. The examiner can normally be reached on Mon-Thu (7:30 - 5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Payne can be reached on 571-272-3024. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/T. k. S./
Examiner, Art Unit 2611

/David C. Payne/
Supervisory Patent Examiner, Art Unit 2611